

4 Lamps, Reflectors and Electrical Equipment

Tricycle and quadricycle dipped and main beam headlamps requirements are as follows:

- If one, it must be mounted centrally, or if adjacent to another lamp, e.g. one dipped beam lamp and one main beam lamp, they must be mounted symmetrically about the centre.
- If two, they must be symmetrically mounted.
- If the maximum vehicle width exceeds 1300mm, two dipped and main beam headlamps are required (1700mm for motorcycle derived tricycles)

Tricycles and quadricycles classed as mopeds do not require a main beam headlamp.

A **“matched pair”** is a pair of lamps which:

- Both emit light of substantially the same colour and intensity, and
- Are both the same size and of such a shape that they are symmetrical to one another.

In a **four-headlamp system** the outer headlamps need not emit the same colour light as the inner pair.

Headlamps must be either white or yellow. Some headlamps have a blue tinge to the light. This is acceptable provided the light is predominantly white.

The precise position of lamps is not part of the inspection, but check visually that they are at about the same height and the same distance from each side of the vehicle.

If a lamp is in such a condition that the intensity is significantly reduced it should be rejected.

Buses first used before 1 October 1969 are only required to be fitted with one headlamp. Where two are fitted, neither the main or dipped beams are required to form matched pair.

Some vehicles may be fitted with High Intensity Discharge (HID) headlamps. It is not permitted to convert existing halogen headlamp units for use with HID bulbs. If it is clear that such a conversion has been carried out, rather than replacing the entire unit with one designed and approved for use with HID bulbs, the headlamp should be rejected.

A **‘light source’** means any bulb, LED or other means of emitting light.

Repairs to lamps must be assessed considering security, colour, light output and durability.

Defect	Category
(a) Headlamp emitted colour, position or intensity not in accordance with the requirements.	Major
(b) Product on the lens or light source which obviously reduces light intensity or changes emitted colour to other than white or yellow.	Major
(c) Light source and lamp not compatible.	Major

4.1.5 Levelling devices

Where a manual headlamp levelling device (driver control) is fitted it must work. Before operating the control, check the setting it is on and return it to the same place.

Vehicles equipped with High Intensity Discharge (HID) or LED dipped beam headlamps may be fitted with a suspension or headlamp self-levelling system. Where such systems are fitted, they must work; however, it is accepted that it may not be possible to readily determine the functioning of self-levelling systems. In such cases, the benefit of the doubt must be given.

HID lamps may have ‘DCR’ marked on the headlamp lens, otherwise they can be identified by:

- taking a few seconds to reach full intensity
- having a bluish tinge to the light
- having an igniter module/inverter behind the headlamp